# National Overview of Precast Concrete Pavement - FHWA

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Sam Tyson
Federal Highway Administration
Office of Pavement Technology



### **Why Precast Concrete Pavement?**

- Maintenance of Traffic Rapid renewal during nighttime and other off-peak periods;
- Long-Life Pavement Performance.



# Precast Concrete Pavement Systems

### **Prestressed & Jointed Systems**







#### **Advances in Precast Pavement**

- 1970s Emergency repairs with reinforced concrete panels (MI & VA);
- 2000 2010:
  - FHWA / Univ. of Texas feasibility study for precast prestressed concrete pavement;
  - Development of both proprietary and nonproprietary precast pavement systems;
  - Jointed / doweled panels adapted for both intermittent repairs and replacement of longer pavement sections.



# Precast Concrete Pavement Applications

- Projects completed <u>CA</u>, CO, DE, IA, <u>IL</u>, MI, MN, MO, NJ, <u>NY</u>, SC, TX, <u>UT</u>, VA.
- Projects awarded / under construction
  - Caltrans I-680 near Oakland;
  - Florida Rte. 92 near Daytona;
  - Utah I-215 near Salt Lake City.
- Project planning / design CA, IL, NY, MT.



## Activities to advance knowledge and use of precast concrete pavement –

- AASHTO Tech. Implementation Group;
- Industry efforts
  - National Precast Concrete Association;
  - Precast/Prestressed Concrete Institute;
  - American Concrete Pavement Association;
  - American Concrete Institute.
- Strategic Highway Research Program SHRP 2 Rapid Renewal / Early implementation and longer-term activities.



### Thank you!

For more information -

Sam Tyson – 202-366-1326 sam.tyson@dot.gov

